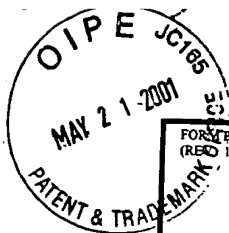




80/048896
531 Rec'd PCT/PT 21 MAY 2001

APPENDIX A

SUBSTITUTE TRANSMITTAL LETTER
TO THE UNITED STATES DESIGNATED/
ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371



09775760.052101
JC07 Rec [redacted] PTO 21 MAY 2001

FORM PTO-1390
(REV. 11-2000)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

SUBSTITUTE
TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER

17795-2

U.S. APPLICATION NO. (If known, see 37 CFR 1.53)

09/775,760

INTERNATIONAL APPLICATION NO.
PCT/US99/17597

INTERNATIONAL FILING DATE
August 3, 1999

PRIORITY DATE CLAIMED
August 4, 1998

TITLE OF INVENTION

PRODUCTION OF POLYSACCHARIDE ETHERS

APPLICANT(S) FOR DO/EO/US

Charles B. Mallon et al.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☒ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ has been communicated by the International Bureau.
 - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☐ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☒ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (COPY)
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.
14. ☐ A SECOND or SUBSEQUENT preliminary amendment.
15. ☒ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☐ Other items or information:

10/048896

531 Rec'd PTO 21 MAY 2001

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)

09/775,760

INTERNATIONAL APPLICATION NO.

PCT/US99/17597

ATTORNEY'S DOCKET NUMBER

17795-2

21. ☒ The following fees are submitted:**BASIC NATIONAL FEE** (37 CFR 1.492 (a) (1) - (5)):Neither international preliminary examination fee (37 CFR 1.482)
nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO
and International Search Report not prepared by the EPO or JPO. \$1000.00International preliminary examination fee (37 CFR 1.482) not paid to
USPTO but International Search Report prepared by the EPO or JPO \$860.00International preliminary examination fee (37 CFR 1.482) not paid to USPTO
but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$710.00International preliminary examination fee (37 CFR 1.482) paid to USPTO
but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00International preliminary examination fee (37 CFR 1.482) paid to USPTO
and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00**ENTER APPROPRIATE BASIC FEE AMOUNT =****CALCULATIONS PTO USE ONLY**

\$860.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☒ 30
months from the earliest claimed priority date (37 CFR 1.492(e)).

\$130.00

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$
Total claims	19 - 20 =		x \$18.00	\$
Independent claims	2 - 3 =		x \$80.00	\$
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$270.00	\$

TOTAL OF ABOVE CALCULATIONS =

\$990.00

☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above
are reduced by 1/2.

+

SUBTOTAL =

\$

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30
months from the earliest claimed priority date (37 CFR 1.492(f)).

\$

TOTAL NATIONAL FEE =

\$

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be
accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +

\$

TOTAL FEES ENCLOSED =

\$990.00

Amount to be
refunded:

\$

charged:

\$

- a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 21-0100 in the amount of \$ 990.00 to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any
overpayment to Deposit Account No. 21-0100 A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card
information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR
1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

SIGNATURE

NAME

REGISTRATION NUMBER

37 CFR 1.34(a)

~~10/348896~~
531 Rec'd PCT/P⁷ 21 MAY 2001

APPENDIX B

MARKED-UP COPY OF FILING RECEIPT



UNITED STATES PATENT AND TRADEMARK OFFICE

531 Rec'd PCT/PT 21 MAY 2001

 COMMISSIONER FOR PATENTS
 UNITED STATES PATENT AND TRADEMARK OFFICE
 WASHINGTON, D.C. 20231
 www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/775,760	02/02/2001	1623	710	17795-2-PC	1	32	2

CONFIRMATION NO. 5787

FILING RECEIPT



OC00000005919178

 UNION CARBIDE CORP.
 39 OLD RIDGEBURY ROAD
 DANBURY, CT 06817

Date Mailed: 03/30/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

John S. Varnes
 John I. Sarlis
 Benito See
 David M. Trampel
 Ratkin Datta

Charles B. Mallon, Residence Not Provided;
 Fumio Takahashi, Residence Not Provided;
 Hiroshi Suzuki, Residence Not Provided;

Continuing Data as Claimed by Applicant

Foreign Applications

Filing under 35 U.S.C. 371, International Application
 Number PCT/US99/17597 filed August 3, 1999 claiming
 priority under U.S. Provisional Application 60/095,263
 filed August 4, 1998.

If Required, Foreign Filing License Granted 03/29/2001

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

Title

production of oligosaccharide ethers
~~Method of preparing modified cellulose ether~~

Preliminary Class

536

Data entry by : ROBEL, ROMAN

Team : OIPE

Date: 03/30/2001

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 36 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15 (b).

PLEASE NOTE the following information about the Filing Receipt:

- The articles such as "a," "an" and "the" are not included as the first words in the title of an application. They are considered to be unnecessary to the understanding of the title.
- The words "new," "improved," "improvements in" or "relating to" are not included as first words in the title of an application because a patent application, by nature, is a new idea or improvement.
- The title may be truncated if it consists of more than 600 characters (letters and spaces combined).
- The docket number allows a maximum of 25 characters.
- If your application was submitted under 37 CFR 1.10, your filing date should be the "date in" found on the Express Mail label. If there is a discrepancy, you should submit a request for a corrected Filing Receipt along with a copy of the Express Mail label showing the "date in."
- The title is recorded in sentence case.

Any corrections that may need to be done to your Filing Receipt should be directed to:

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231

APPENDIX E

NOTICE TO FILE MISSING PARTS



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/775,760	02/02/2001	Charles B. Mallon	17795-2-PC

CONFIRMATION NO. 5787

FORMALITIES LETTER



OC000000005919179

UNION CARBIDE CORP.
39 OLD RIDGEBURY ROAD
DANBURY, CT 06817

Date Mailed: 03/30/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$ 130.

The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given TWO MONTHS from the date of this Notice within which to correct the informalities indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- The Claim(s) commencing on a separate sheet (37 CFR 1.75(h)).
- A substitute specification in compliance with 37 CFR 1.52 because:
 - Line spacing on the specification, claims, or abstract is not 1-1/2 or double spaced (See 37 CFR 1.52(b)).
- An abstract was not provided for this application. An abstract of the technical disclosure is required under 37 CFR 1.72(b).

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



05-22-01

JC19 PCT/PTO-2 MAY 2001

17795-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 09/775,760

Group Art Unit: 1623

Inventor(s): Mallon et al.

Filed: 2/2/01

Title: PRODUCTION OF POLYSACCHARIDE ETHERS

NOTICE TO FILE MISSING PARTS OF
NON-PROVISIONAL APPLICATION

Hon. Assistant Commissioner for Patents
Washington, DC 20231

Sir:

This communication is in response to the Notice to File Missing
Parts of Non-Provisional Application dated March 30, 2001.

It is noted that the above-identified patent application is a U.S.
national filing under 35 U.S.C. 371. The following are the particulars
of the application.

International Application No.: PCT/US99/17597

International Filing Date: August 3, 1999

Priority Dated Claimed: August 4, 1998
(Provisional No. 60/095,263)

Applicants: Charles B. Mallon
John S. Vames
John I. Sarlis
Benito See
David M. Trampe
Rathin Datta

Due to an apparent clerical error, applicants' file does not
contain copies of Form PTO-1390, "Transmittal Letter to the United
States Designated/Elected Office (DO/EO/US) Concerning A Filing
Under 35 U.S.C. 371". Accordingly, enclosed in Appendix A is a
Substitute Form PTO-1390 for the above-identified application.

Date of Deposit: **MAY 21 2001** "EXPRESS MAIL"
Mailing Label No. **EL180389077 US**
I hereby certify that this paper or fee is being
deposited with the United States Postal Service
"Express Mail Post Office to Addressee" service
under 37 CFR 1.10 on the date indicated above
and is addressed to the Commissioner of Patents
and Trademarks, Washington, D.C. 20231

Carolyn Vandergrift
(Typed or printed name of person
mailing paper or fee)
Carolyn Vandergrift
(Signature of person mailing paper
or fee)



09775760 .052101

17795-2

It is requested that a Corrected Filing Receipt be generated by the PTO. Enclosed in Appendix B is a marked-up copy of the Filing Receipt dated March 30, 2001.

In the Notice to File Missing Parts, it was alleged that the oath or declaration was missing. It is noted that an executed Declaration For Utility or Design Patent Application (Form PTO/SB/01) was filed with the U.S. Receiving Office on August 3, 1999 (copy enclosed in Appendix C).

Also, in the Notice to File Missing Parts it was alleged that:

The required item(s) identified below must be timely submitted to avoid abandonment:

- The Claim(s) commencing on a separate sheet (37 CFR 1.75(h)).
- A substitute specification in compliance with 37 CFR 1.52 because:
 - ◆ Line spacing on the specification, claims, or abstract is not 1 1/2 or double spaced (See 37 CFR 1.52(b)).
- An abstract was not provided for this application. An abstract of the technical disclosure is required under 37 CFR 1.72(b).

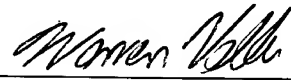
It is believed that the International Bureau has communicated, or shall communicate, amended claims (dated July 26, 2000) to the U.S. Designated Office and that the specification and abstract are presently on file in the U.S. Receiving Office. Nevertheless, for the convenience of the PTO, enclosed in Appendix D is a Substitute Specification under 37 CFR 1.125. The substitute specification is equivalent to application PCT/US99/17597, is believed to be the specification of record and contains no new matter.

Also filed herewith is a Preliminary Amendment in order to bring the claims in the substitute specification in conformance with the claims as amended on July 26, 2000 in the International Examination.

A copy of the Notice of File Missing Parts is enclosed as Appendix E.

An early and favorable Office Action is courteously solicited.

Respectfully submitted,



Warren K. Volles
Reg. No. 33,810
Attorney for Applicant(s)
(203) 794-6360
37 CFR 1.34(a)

Union Carbide Corporation
Danbury, Connecticut 06817-0001
Dated: May 21, 2001
PAT 160A:5.98